

Biology • Chemistry
Clinical Psychology
Ecology • Education
Engineering Mathematics
Engineering Sciences
Geography
Public Health
Special Education

CALIFORNIA'S JOINT DOCTORAL PROGRAMS



CALIFORNIA
POSTSECONDARY
EDUCATION
COMMISSION

Summary

This report responds to questions about the joint doctoral programs that the California State University offers in cooperation with the University of California and the Claremont Graduate School. The document is descriptive in nature and includes information about both the historical development of what are now a dozen such programs and the enrollments, degree production, characteristics of students in these programs, and the job placement of graduates over the past ten years. The first program was offered in 1965, but the statistical data presented here are limited to the decade that began in 1980-81 because of incomplete information about students who enrolled earlier.

Part One of the report discusses the origins and scope of the study. Part Two offers an overview of the purposes, growth, and current status of the programs. Part Three describes the number, characteristics, background, and job placement of students in the programs. Part Four lists the primary characteristics of each of the current programs. And Part Five identifies nine issues for further consideration regarding the programs.

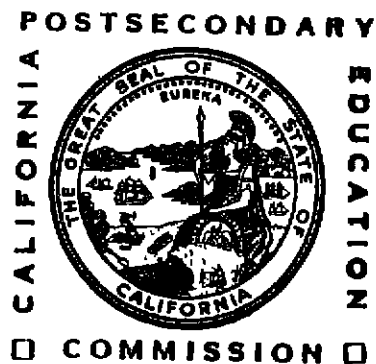
The Commission views this report as preliminary to and a small part of its comprehensive study of graduate education in California, which it began late in 1991 and expects to complete during Fall 1992. As a result, this report does not include recommendations about these joint doctoral programs in anticipation of the larger report containing such suggestions.

The Commission adopted this report at its meeting of January 27, 1992, on recommendation of its Policy Evaluation Committee. Additional copies of the report may be obtained from the Publications Office of the Commission at (916) 324-4992.

CALIFORNIA'S JOINT DOCTORAL PROGRAMS

*A Report on Doctoral Programs Offered
by Campuses of the California State University
with Campuses of the University of California
and the Claremont Graduate School*

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
Third Floor • 1020 Twelfth Street • Sacramento, California 95814-3985





COMMISSION REPORT 92-3
PUBLISHED JANUARY 1992

Contributing Staff Dorothy M. Knoell

This report, like other publications of the California Postsecondary Education Commission, is not copyrighted. It may be reproduced in the public interest, but proper attribution to Report 92-3 of the California Postsecondary Education Commission is requested.

Contents

1. Background for the Report	1
Origins of the Report	1
Recent Events Related to the Report	1
Previous Relevant Studies by the Commission and the Systems	1
Scope of the Rest of the Report	3
2. Overview of the Programs	5
History of the Programs	5
Purposes of the Joint Doctoral Programs	6
Legislative Concerns About the Joint Doctorate	6
Growth and Current Status of the Programs	8
Procedures for Establishing Programs	10
3. Students in the Programs	11
Overview	11
Annual Enrollment	11
Gender and Racial-Ethnic Background of Enrollees	11
Gender and Racial-Ethnic Background of Degree Recipients	13
Program Productivity	14
Time to Degree	16
Institutions Last Attended	16
Job Placement After Attainment of the Degree	18

4. Characteristics of Current Programs 21

Chemistry	21
Special Education (San Francisco Bay Area)	21
Special Education (Los Angeles)	22
Ecology	23
Education with a Multicultural Focus	24
Biology	25
Clinical Psychology	25
Engineering Sciences / Applied Mechanics	26
Engineering Mathematics	27
Public Health	27
Geography	28

5. Issues for Consideration 29

1. State-Level Oversight	29
2. Financing	29
3. Statewide and Intersegmental Enrollment Planning	30
4 Student Access	30
5. Job Placement	30
6. Time to Degree	30
7. Duplication of Effort	31
8. Relationship to Undergraduate Education	31
9. State-Level Data	31

References 33

Displays

1. Analysis of Item 6610-001-001 of the 1988-89 Budget Bill by the Office of the Legislative Analyst	7
2. California State University Joint Doctoral Programs Authorized Through January 1991	9
3. Projected Joint Doctoral Programs as of 1991	10
4. Annual Enrollment by Program, 1980-81 Through Fall 1990	12
5. Gender and Race/Ethnicity of Fall 1990 Enrollment, by Program	13
6. Gender and Race/Ethnicity of Joint Doctoral Degree Recipients, 1980-81 Through 1989-90, by Program, and First Year Offered	14
7. Numbers of Students Entering Since 1980-81 and Receiving Joint Doctoral Degrees by 1990-91 by Program and Year First Offered	15
8. Time to Degree for Students Graduating Between 1980-81 and 1989-90 by Program and First Year Offered	16
9. Types of Institutions from Which Joint Doctoral Students Received Their Baccalaureate and Master's Degrees, by Program, 1980-81 Through 1990-91	17
10. First Job Placement After Receipt of Degree, 1980-1990	19

Origins of the report

At the June 1990 meeting of the Policy Evaluation Committee, Commissioners asked about the success of the California State University's joint doctoral programs -- i.e., those defined as graduate-level curricula leading to a Ph.D or Ed.D degree that are offered by a campus of the California State University in cooperation with the University of California or an independent California college or university, to which students are admitted by both institutions and with both institutions jointly conferring the degree. Commissioners also inquired about the number, quality, and cost-effectiveness of the programs, and about the placement of their graduates. The context for these questions was the presentation for action of the Commission's annual report on program evaluation in California. Staff responded that the effectiveness of these joint programs had not been evaluated and that the overall need for expanding them had not been assessed, although the California State University and the University of California were continuing to submit proposals for new ones.

Staff in the Chancellor's Office of the State University have taken responsibility for obtaining accurate, current information about students, degrees, and funding from its campuses and the cooperating universities for use in this report.

Meanwhile, Commission staff had begun exploratory work on the topic of the joint doctorate, and it added the topic to the Commission's Plan of Work for 1990-91. Initially the staff planned to report its findings to the Commission in March 1991. Due to staffing changes at the Commission and gaps in available information from the universities, the staff decided to begin work anew with a prospectus that addressed some of these questions. The Commission's Educational Policy Committee discussed that prospectus at its meeting in March 1991, after which the Intersegmental Program Review Council reviewed it and made suggestions for changes in the nature and scope of the study.

Recent events related to the report

More recently, graduate education plans for the two university systems have taken on new importance as part of the Commission's overall long-range planning. Therefore, the Commission included a new project, *Reviewing Graduate Education Plans*, in its 1991-92 Plan of Work that it adopted in September 1991. In that study, staff will conduct a comprehensive exploration of the long-range planning needs of California with respect to graduate education, including a review of the graduate enrollment plans of the University, the State University, and California's independent universities. Given that projected study, staff views the present analysis as a description of the joint doctoral programs as they are being carried on by the several State University campuses, together with a discussion of some of the policy issues that they raise for the larger study.

Previous relevant studies by the Commission and the systems*Commission reports*

A little more than 10 years ago -- in February 1980 -- the Commission adopted a *Report on Joint Doctoral Degree Programs* that staff prepared in response to the Legislature's request in the *Supplemental Report of the Conference Committee on the 1979-80 Budget Bill* calling for a comprehensive examination of the programs. Only six programs had been established by the time, largely because the Legislative Analyst had recommended in 1972 that they be phased out by admitting no new students, beginning in 1972-73 -- a moratorium that proved to be short-lived. That report traced the background of these joint programs, described briefly the history and status of the six existing programs, and presented general observations, findings, and recommendations -- to strengthen and improve program coordination between cooperating campuses, review

the programs in ecology and genetics in regard to their need and cost-effectiveness, refine enrollment determination for budget purposes, and maintain existing formulas for funding if certain conditions could be met.

Several other Commission reports on graduate education do not focus on the joint doctoral degree but are relevant to the Commission's larger concerns about planning for graduate education. The first is *Shortening Time to the Doctoral Degree* (1990) that the Commission produced in response to Senate Concurrent Resolution 66 (1989). The report made no recommendations but concluded that the average elapsed time to the doctorate at the University had increased almost 15 percent between 1968 and 1988, to 7.7 years, and that the increased time was more a function of the discipline-based tradition of graduate education than of University or State policies. The next step was planned to be a review of the University's new planning document for graduate education, with attention to the broad range of issues confronting graduate education that includes time to degree, attrition, and diversification of the student body and faculty.

Two additional Commission studies merit citation in that they address issues of need for graduate education in California. The first, *The Doctorate in Education: Issues of Supply and Demand in California* (March 1987), assessed the need for new degree programs with particular reference to the State University's intention at that time to seek to extend its mission to include the awarding of an independent doctoral degree in education. The second, *Planning for a New Faculty: Issues for the Twenty-First Century* (September 1990) sought to (1) highlight potential policy interventions and broad policy issues that relate to faculty replenishment and expansion in graduate education, (2) suggest a framework to guide State policy makers and educators, (3) provide an overview of the work that had already been done in California and nationally, and (4) focus attention on the policy imperative of diversifying the graduate student and faculty ranks. That report made no recommendations but concluded that "with careful, innovative, and integrated planning as well as adequate financial support, California has the opportunity to dramatically expand and improve the advanced training that will prepare its leaders of the next century" (p. 30).

University of California

The report of the University of California with the most relevance to this document is *Future of Graduate Education in the University of California: Changing Job Market Opportunities and Assessment of Needs for University of California Graduate Enrollment Growth* (April 1991). That report notes that growth in University doctorates in the field of education will be accomplished in part through joint programs in which students are enrolled for part of their programs in the State University. Thus it adjusts the University's previous plan downward by an estimated 200 graduate students.

The California State University

The State University's Advisory Committee to Study Graduate Education in the California State University submitted its report, *Graduate Education in the California State University: Meeting Public Needs Consistent with Educational Priorities*, to the Trustees in December 1989. The sixth chapter of that report -- "Doctoral and Cooperative Graduate Programs" -- contained three recommendations:

- 1 Campuses preparing doctoral programs should evaluate proposals on the basis of four minimal criteria -- faculty with appropriate experience; space, equipment, facilities, and support staff, potential for obtaining funding for student aid and student research projects; and adequate library holdings and staff.
- 2 Programs should be implemented only where supplementary budget support is provided for them.
- 3 Campuses should attempt to articulate one or more of their master's degree programs with those in a doctoral degree-granting institution, emphasizing fields where there is underrepresentation of women and ethnic/racial groups on the faculty; the system should also increase the number of joint doctoral programs that it offers.

In addition, Chapter Seven included seven recommendations for increased funding for graduate education in the State University generally, apart from the special arrangements that had been made for State support of the joint doctoral programs.

Upon receipt of the report, the Trustees requested the Chancellor to prepare a plan for accomplishing the goals of the Advisory Committee and implementing its recommendations. The Chancellor submitted the plan at the September 1991 meeting of the Trustees, who adopted a resolution that (1) endorsed the definition of quality in graduate education that was described in the plan as the standard to which graduate programs in the State University should aspire, and (2) referred the plan to the Chancellor for implementation as funds and circumstances permit. In large part, progress on the implementation plan awaits more favorable State revenue conditions.

Scope of the rest of the report

Part Two of this report is a narrative description of the historical development of California's joint doctoral programs. Part Three provides information on enrollments, degree productivity, job placement, and student characteristics across all of the programs. Part Four describes the basic characteristics of each currently offered program. Finally, Part Five sets forth a series of issues that the analysis has raised to date.

2

Overview of the Programs

History of the programs

By the time of California's Master Plan for Higher Education in 1960, graduate education in California's 13 State Colleges had evolved from master's degrees in education and graduate credentials for public school teachers and staff to include master of science degrees in such career fields as business, master of arts degrees in the liberal arts and sciences, and finally professional master's degrees like the Master of Social Work. During the 1950s and into the 1960s, institutions comparable to California's State Colleges in other states had begun to expand their mission to include the offering of the doctoral degree -- for example, in Illinois and Michigan, and pressure was intense to break the statutory monopoly on the doctorate that the University of California had held. The study that produced the Master Plan afforded the State Colleges the opportunity to pursue a significant increase in their mission that would authorize them to award the doctorate as well.

In 1960, California's State Colleges varied widely in size, age, student body characteristics, and scope of academic offerings. Some -- like San Diego State College -- were fully developed programmatically to the limits of their statutory mission, while others -- like the new campus in Hayward -- had scarcely begun operations. A few campuses had faculty with externally funded research at that time, but the State -- while not prohibiting the conduct of basic research in the State Colleges -- did little to support it, either through recognizing the function in computing faculty workloads or in direct support for research equipment or facilities.

The process of compromise that led to the authorization of the joint doctorate for the State Colleges is described succinctly in the Commission's 1980 *Report on Joint Doctoral Degree Programs* (p. 2)

As the Master Plan Survey Team was completing its work in December 1959, one issue threatened to thwart agreement on the Plan as

a whole. The stumbling block was the question of whether, in the differentiation of segmental functions, the State Colleges should be authorized to award the doctorate. In his account of the debate surrounding this issue, Arthur Coons, chairman of the Survey Team, summarized several of the options the Team considered before settling on the joint doctoral plan as the most viable compromise.

A compromise was required, in the first place, because of a concern within the State Colleges that without the authority to grant the doctorate, and with the research function already assigned to the University of California, the State Colleges would be reduced to second-class status as academic institutions. For its part, the University faculty had little incentive for sharing either of these functions, its agreement to the joint doctoral plan was a concession, of course, but a relatively innocuous one that did not require the University to relinquish control over doctoral level instruction in public higher education. After having agreed to the compromise represented by the joint doctoral plan, some factions within the State College system continued throughout the 1960s to press for an autonomous doctorate, but in recent years the issue seems to have receded (Coons, 1968).

The last part of that statement is no longer correct, since on two occasions after publication of that report the issue of a State University doctorate has been dealt with once more, and authorization for the joint doctorate was expanded statutorily in 1969 to allow the State University to offer such programs with independent colleges and universities. In any case, the Master Plan Survey Team affirmed strongly in its 1960 report the University's exclusive right to offer the stand-alone doctorate, while recommending that the State University be permitted to develop joint degree programs with the University.

Purposes of the joint doctoral programs

The primary goal of the *Master Plan* proposal for the joint doctoral degree was to remove the last remaining barrier to the Survey Team's completion of its work. Beyond that goal, the Survey Team offered no formal statement of the purposes or goals that this expanded mission of the State University was to achieve. Still, there appear to be benefits to students, campuses, and the State that can be inferred as purposes even if not expressed at that time -- all of which should be kept in mind in assessing their value.

Benefits to students

Access is the overriding benefit to students -- the opportunity to pursue a doctoral degree at lower costs and with less disruption of personal and professional life because of geographic accessibility and lower fees than those that the University and independent institutions charge. Still another benefit results from access to graduate faculty and research facilities that would not be available if the State University offered the doctoral degree unilaterally.

Benefits to campuses

Participation in joint doctoral degree programs may increase the prestige of a State University campus over what it enjoys as a master's degree-granting institution. This increased prestige may enable it to recruit a more broadly qualified faculty and external funding for research by faculty. Joint doctoral programs also yield benefits to faculties in the two systems by facilitating their working together on professional development activities.

Benefits to programs

Programmatic benefits result from two campuses sharing their faculty and other resources so as to enable them to offer a joint doctoral program of a nature and quality that neither could offer alone.

Benefits to the State

The primary benefit to the State of California may be to increase that part of the State's workforce that

needs education at the advanced graduate level, including education, business, industry, professional services, and government. A second benefit may be to attract additional high-technology industry to the State by increasing the availability of doctoral education.

Legislative concerns about the joint doctorate

California's Office of the Legislative Analyst has repeatedly voiced concerns in its annual review of the Governor's Budget about the benefits and cost-effectiveness of the State's joint doctoral programs, including recommendation that no new students be enrolled starting in 1972-73 and, by implication, that no new programs be authorized -- a recommendation rejected by the Legislature. In order to give the reader a perspective on the issues raised by the Analyst, Display 1 provides a portion of the analysis presented by the Analyst in the 1988-89 year of one joint doctoral program for illustrative purposes only.

The specific concerns raised in this analysis as well as the Legislative Analyst's general perspective on joint doctoral programs have been repeatedly rejected by the Legislature. In fact, further discussions with the Analyst resulted in an agreement not to challenge any future submissions of the joint doctoral programs on fiscal grounds if a new budgetary approach to funding these programs was adopted. Subsequent to these discussions, Assembly Bill 617 was passed, stating:

It is further the intent of the Legislature that the development of joint doctoral programs operated by the California State University and the University of California or one or more accredited independent institutions of higher education be established and expedited (Chapter 1198, Section 66024)

The 1980s Master Plan Review

In the mid-1980s, the Commission for the Review of the Master Plan for Higher Education studied at some length the issue of providing greater access to the doctoral degree and concluded that this need could be best met by expanding current provisions

DISPLAY 1 Analysis of Item 6610-001-001 of the 1988-89 Budget Bill by the Office of the Legislative Analyst

New Joint Doctoral Program is Not Needed

We recommend that the \$186,000 General Fund augmentation requested for a new CSU-UC joint doctoral program be deleted, because the program's objectives can be achieved at less cost by expanding existing doctoral programs

The budget proposes \$186,000 from the General Fund to establish a new joint doctoral program in engineering (specifically "Engineering Sciences/Applied Mechanics") in 1988-89. The program would be operated by San Diego State University's College of Engineering and UC San Diego's Department of Applied Mechanics and Engineering Sciences.

Our analysis indicates that the proposed new program is not justified, for two reasons. (1) the cost of the program is excessive, and (2) comparable programs currently are available at UC campuses.

Cost Too High. The proposed augmentation of \$186,000 would be allocated to San Diego State University for 4.7 new positions, in order to support a projected first-year enrollment of seven students. These funds would be supplemented by regular enrollment-generated funds, provided in accordance with FTE reported by both UC and CSU for enrollment growth in the new program. (UC indicates that the system will not budget any enrollment for this program until 1989-90. This enrollment would be supported within UC's regular budget allocation.)

This funding arrangement illustrates the relatively high cost of joint doctoral programs. When UC expands or establishes a new Ph.D. program, the state does not provide any funding beyond the regular marginal cost per FTE -- \$4,903 in 1988-89. In contrast, the budget proposal would result in a first-year expenditure of approximately \$27,000 per stu-

dent for the enrollment projected at CSU's San Diego campus.

No Uniqueness Shown. Presumably, the rationale for providing CSU with a budget allocation beyond the regular enrollment-generated funds is that CSU's ongoing level of funding is not based on the need to accommodate the relatively high instructional costs associated with the education of doctoral students. It is, therefore, incumbent upon CSU, when proposing the establishment of a joint doctoral program, to justify the high cost of the program by showing that the proposed joint arrangement would be more effective than the less expensive alternative of establishing or expanding a comparable program solely within the UC. In the case of the proposed new joint doctoral program in engineering, however, the system has not justified these additional costs.

In our review of the proposed San Diego State University/UC San Diego program, we find nothing to indicate why a comparable program could not be established by the less costly method of expanding the existing engineering programs at UC. Six campuses of the University of California (Berkeley, Los Angeles, San Diego, Santa Barbara, Davis, and Irvine) operate doctoral programs in engineering. Each of these campuses, moreover, offers a specific degree in the fields of Mechanical Engineering or Applied Mechanics, with related specializations in the same areas that would be emphasized in the proposed joint doctoral program. The UC could expand enrollment in its engineering programs if a need for additional Ph.D.s in this program area, relative to others, were demonstrated. This could be accomplished either through a reallocation of UC's budgeted enrollment -- at no additional state cost -- or by augmenting UC's budget at the regular marginal rate for graduate students.

for intersegmental programs. That Commission's major concern was geographic access to the doctorate for residents of central California, where no University of California campus yet exists, and it recommended that the State University's mission statement include the provision that "the joint doctoral degree may be awarded jointly with the University of California or with a private institution of postsecondary education, provided it is approved by the California Postsecondary Education Commission" (1987, p 11) -- thus continuing existing State policy

The State University Trustees' initiative of 1985

The Trustees of the California State University adopted a resolution in November 1985, proposing to extend that system's mission to include awarding an independent doctoral degree in education. The resolution asserted that the need for additional programs had been demonstrated and called upon its staff to work with appropriate State authorities, in connection with the Master Plan review, to modify the system's mission to include the independent offering of this degree

As noted earlier, the Commission undertook a study of *The Doctorate in Education: Issues of Supply and Demand in California* (1987) in response to the Trustees' initiative but with a broader focus -- the State's overall need for additional doctoral programs in educational administration. Based on its findings and conclusions about need, the Commission recommended that (1) no new doctoral programs in educational administration be established at that time in any institution not then offering the degree, and (2) an intersegmental committee investigate need for, and other factors relating to, programs that would be specifically designed for present and future administrators in the California Community Colleges.

Growth and current status of the programs

All 15 joint doctoral programs that have been approved since authorization of this State University function in the Donahoe Higher Education Act of 1960 are shown in Display 2 on page 9, along with the cooperating institution and the year started and

-- in one case -- ended. The first such program -- a Ph D in chemistry -- was offered by San Diego State University and the University of California, San Diego, beginning in 1965. Six additional programs were approved during the next five years, but two of them were never implemented (programs proposed by California State University, Chico, in botany and by San Jose State University, in Materials Engineering). A third program of the six -- San Diego State University's joint doctorate in genetics with the University of California, Berkeley -- was first offered in 1968 but terminated in 1986, with no new students admitted after Fall 1981. A fourth program -- San Diego State University's program in ecology with the University of California, Riverside -- was moved to the University's campus at Davis during its early years, where it continues to be offered today. The other two programs from this original group are both in special education -- (1) California State University, Los Angeles, with the University of California, Los Angeles, and (2) San Francisco State University with the University of California, Berkeley -- and both have sustained a record of high enrollments and degree production.

Only one new program was proposed and authorized during the 1970s -- San Diego State University's joint doctorate in education with the Claremont Graduate School -- the first one offered in cooperation with an independent institution. This slow development of programs was due in part to a recommendation by the Legislative Analyst that such programs be phased out by ceasing to enroll new students starting in 1972-73. The Analyst also expressed the view that the programs had not fulfilled their promise of serving as an intersegmental bridge for the benefit of students, faculties, and institutions, and that they were costly. Furthermore, the Legislature decreed in the 1972-73 Budget Act that funds could not be expended to accept new students into any joint doctoral program for fiscal year 1973-74. This moratorium lasted for only one year, but conditions did not appear favorable for the expansion of joint programs.

Twelve programs enrolled students in the Fall 1991 term, including two that were being offered for the first time -- educational leadership at California State University, Fresno, with the University of California, Davis, and geography by San Diego State University with the University of California, Santa Barbara.

DISPLAY 2 *California State University Joint Doctoral Programs Authorized Through January 1991*

<u>CSU Campus</u>	<u>Program</u>	<u>Cooperating Campus</u>	<u>Start Year</u>	<u>End Year</u>
Chico	Botany ¹	University of California, Davis	----	
Fresno	Educational Leadership	University of California, Davis	1991	
Long Beach	Engineering Mathematics	Claremont Graduate School	1990	
Los Angeles	Special Education	University of California, Los Angeles	1968	
San Diego	Biology	University of California, San Diego	1984	
	Chemistry	University of California, San Diego	1965	
	Clinical Psychology	University of California, San Diego	1985	
	Ecology	University of California, Davis	1970	
	Education	Claremont Graduate School	1978	
	Engineering Sciences	University of California, San Diego	1989	
	Genetics	University of California, Berkeley	1968	1986 ²
	Geography	University of California, Santa Barbara	1991	
	Public Health	University of California, San Diego	1990	
San Francisco	Special Education	University of California, Berkeley	1967	
San Jose	Materials Engineering ¹	University of California, Berkeley	----	

1 Program authorized but not implemented because the Legislature did not fund it

2 No new students accepted after Fall 1981 Year listed is the year that the program was deleted from the catalog

Source California Postsecondary Education Commission staff analysis

San Diego State University offers eight of the dozen programs that are now in operation, in cooperation with three University campuses and one independent institution. The University of California, San Diego cooperates in five of the 12 State University campuses at Fresno, Long Beach, Los Angeles, and San Francisco each now offer one joint doctoral program -- three in cooperation with University campuses and one with an independent institution. The State University campuses have projected eight additional programs for review during the next five years, as Display 3 on page 10 shows -- four at San Diego State University, and one each at California State University, Los Angeles, Bakersfield, Northridge, and Sacramento -- the last three, if approved, being the first joint doctoral program on their respective campuses. This brings to eight the number of State University campuses that may be offering these degree programs, but with San Diego

State still the only campus with a wide range of programs offered cooperatively with several university campuses

The fields in which existing programs are offered are education (four), science (three), engineering (two), clinical psychology (one), geography (one), and public health (one). Two of the four in education are in special education and one has a multicultural emphasis while cutting across specializations. Five of the eight projected programs are also in professional education -- in administration, leadership, and science and mathematics education. The remaining are in communicative disorders, geological sciences, and craniofacial biology.

If the projected programs are approved and implemented, then nine of a total of 20 leading to an Ed D or Ph D. will be in some field of professional education.

DISPLAY 3 *Projected Joint Doctoral Programs as of 1991*

<u>Projected Program</u>	<u>Degree</u>	<u>Cooperating Campuses</u>	<u>Start Year</u>
Educational Administration ¹	Ed.D	UC Los Angeles/CSULA	To be determined
Communicative Disorders ²	Ph D.	UC San Diego/SDSU	1992
Educational Administration ¹	Ed.D.	UC San Diego/SDSU	1993
Science and Mathematics Education	Ph.D	UC San Diego/SDSU	1993
Educational Leadership	Ed D	UC Santa Barbara/CSU Bakersfield	1994
Geological Sciences	Ph.D	UC Santa Barbara/SDSU	1992
CranioFacial Biology	Ph D.	CSU Northridge/USC	1991
Educational Administration	Ed D	CSU Sacramento and UOP	1992

1 Appears on the University of California list only

2 Appears on the California State University list only

Source California Postsecondary Education Commission staff analysis of California State University and University of California program plans

Nearly all the joint doctoral programs are in urban areas where the University or independent doctoral degree-granting institutions or both are located -- the major exception being the new program at California State University, Fresno, where University of California professors from Davis will offer their part of the program on the Fresno campus. This new program thus meets the need for geographic access in the Central Valley and expects to attract Latino and other students from underrepresented groups. While most of San Diego State University's current and projected programs are with the University of California, San Diego, three of its current and one of the projected programs are with less proximate campuses -- specifically, the University at Davis and Santa Barbara and the Claremont Graduate School. In some instances -- for example in chemistry, the cooperating University campus offers a "standalone" doctorate in the general field, as well as the joint degree

pus, the campus administration sends a request to its respective systemwide office for "permission to negotiate." Once that request is approved, the faculty jointly develop the actual proposal that, when approved by the various organizational layers at both campuses, then goes to both systemwide offices for review. External reviewers are often used, and the process also includes review by the Coordinating Committee on Graduate Affairs and the Academic Planning and Program Review Board at the University, as well as by the Joint Graduate Board. That board was created in 1962 by the Regents of the University and the Trustees of the State Colleges, with the concurrence of the Coordinating Council for Higher Education -- the predecessor of the California Postsecondary Education Commission -- in order to implement the provision of the Donahoe Act relating to joint doctoral programs.

When a State University campus proposes a joint doctoral program with an independent college or university, the Postsecondary Education Commission convenes its own Joint Graduate Board that includes representatives from the independent sector and the State University

At the State level, the staff of the Postsecondary Education Commission reviews all proposals, as it is charged to do for all new degree programs offered by California's public colleges and universities

Procedures for establishing programs

Within the California State University and the University of California, the initial impetus for new joint doctoral programs resides at the departmental level. After appropriate consultation at each cam-

3

Students in the Programs

Overview

The dozen joint doctoral programs that the State University is now offering vary widely in age, size of enrollment, apparent demand for admission, productivity, and types of students who enroll. Of the 12 programs, five were established between 1965 and 1978, seven between 1980 and 1991 – and four of these in the last two years. For various reasons related to the age of the programs, student and degree data on some of the programs are incomplete. Nonetheless, this section presents as accurate a composite picture as possible of annual enrollments across all programs, the gender and racial-ethnic composition of their Fall 1990 enrollees, the number of students who have been awarded degrees by date of entry, gender, and racial-ethnic composition of degree recipients, the time to degree for graduates, and the types of institutions from which the students received their baccalaureate and master's degrees.

In the tables that follow, the data are truncated in two ways. First, data prior to 1980 are not shown because of both gaps and anomalies in information on gender and racial-ethnic background. Second, there are only limited enrollment data for Fall 1991. One additional shortcoming lies in the aggregation of data in such a way that they sometimes do not account for students who were admitted a number of years ago and may still consider themselves enrolled.

Annual enrollment

Display 4 on the next page shows annual enrollments by program, from 1980-81 through Fall 1990. The summary at the bottom of the display shows a fairly steady increase from 103 students enrolled in five programs during 1980-81 to 274 students enrolled in ten programs in Fall 1990 -- a decade later. The last two years for which data are available show large increases in enrollment that are due

only in part to the establishment of three new programs.

Thus, enrollment increased by 166 percent during the past decade that ended with ten programs being offered on four State University campuses. However, the 274 joint doctoral students are numerically a small part of the State University's Fall 1990 post-baccalaureate enrollment of more than 70,000 students.

Enrollments in some programs were quite stable during the past decade -- for example, in chemistry and the two programs in special education -- while others increased dramatically -- especially education and clinical psychology at San Diego State University. Demand -- as measured by number of applications -- may be related to enrollment for some programs, particularly clinical psychology and education at San Diego State University, but changes in enrollment from year to year are also related to student retention and time to the degree as well as preestablished enrollment limits for each program.

Gender and racial-ethnic background of enrollees

Display 5 shows the gender and racial-ethnic background of the students enrolled in each program and overall in Fall 1990. Proportions of men and women and representation from the several racial/ethnic groups vary by program but, overall, enrollees in Fall 1990 were primarily women (59 percent) and White (71 percent).

The patterns of enrollment in the several programs by gender are not surprising: women are in the majority in the three programs in professional education and in clinical psychology, while men are a majority in the smaller programs that are science- and mathematics-related.

Asian/Pacific Islander students comprised 10 percent of the joint doctoral students in Fall 1990; Latino students, 8 percent; Black students, 4 percent;

DISPLAY 4 Annual Enrollment by Program, 1980-81 Through Fall 1990

Program	1980- 81	1981- 82	1982- 83	1983- 84	1984- 85	1985- 86	1986- 87	1987- 88	1988- 89	1989- 90	Fall 1990
Chemistry: SDSU and UCSD	15	12	13	15	14	16	18	16	18	19	18
Special Education: SFSU and UCB	25	32	33	31	34	36	41	35	34	39	45
Special Education: CSULA and UCLA	18	25	26	26	26	21	21	19	21	18	21
Ecology: SDSU and UCD	11	12	14	15	13	15	13	15	14	17	19
Education: SDSU and Claremont	34	41	51	58	64	69	74	66	67	75	79
Biology: SDSU and UCSD					4	8	13	17	21	20	21
Clinical Psychology: SDSU and UCSD						8	17	24	33	43	52
Engineering Sciences: SDSU and UCSD										1	3
Engineering Mathematics: CSULB and Claremont											3
Public Health: SDSU and UCSD	—	—	—	—	—	—	—	—	—	—	3
Total	103	122	137	145	155	173	201	192	208	232	274

Source: Office of the Chancellor, The California State University

and 7 percent were "other" or not known with regard to racial-ethnic identity. The program in education offered by San Diego State University and the Claremont Graduate School, with a multicultural focus and seven areas of specialization, enrolled at least one student from each racial/ethnic group except Native American. While the total group was two-thirds women, it included more Asian and Latino men than women but no Black men.

Numbers of Asian, Black, Latino, or Native American students in most programs were small in Fall 1990. Interestingly, the new program in engineering mathematics of California State University, Long Beach, and the Claremont Graduate School enrolled 13 men in Fall 1990, only five of whom

were White. The first class also contained five Asian/Pacific Islander students, one Black, and two Latino students.

Biology on the San Diego campuses enrolled five Asian/Pacific Islander men but no non-White women. Three men but no women from this racial-ethnic group were enrolled in the chemistry program at these San Diego campuses and one in ecology in the joint program with the Davis campus. Asian women, on the other hand, enrolled in the three programs in professional education (seven) and clinical psychology (two) in Fall 1990.

Clinical psychology also enrolled two Black and two Latino men and three Latino women that same term. Unlike the Black women, all of whom were in

DISPLAY 5 Gender and Race/Ethnicity of Fall 1990 Enrollment, by Program

<u>Program</u>	<u>Gender</u>	<u>Total</u>	<u>Asian Pacific Islander</u>	<u>Black</u>	<u>Filipino</u>	<u>Latino</u>	<u>Native American</u>	<u>White</u>	<u>Other or Unknown</u>
Chemistry:	Male	14	3	0	0	0	0	10	1
SDSU and UCSD	Female	4	0	0	0	1	0	3	0
Special Education:	Male	7	0	0	0	0	0	7	0
SFSU and UCB	Female	38	2	3	0	2	0	31	0
Special Education:	Male	3	0	0	0	1	0	2	2
CSULA and UCLA	Female	18	2	1	0	0	0	15	0
Ecology:	Male	15	1	0	0	1	0	9	4
SDSU and UCD	Female	4	0	0	0	0	0	4	0
Education: SDSU	Male	25	4	0	0	7	0	12	2
and Claremont	Female	54	3	4	1	3	0	40	3
Biology:	Male	13	5	0	0	0	0	7	1
SDSU and UCSD	Female	8	0	0	0	0	0	8	0
Clinical Psychology:	Male	17	0	2	0	2	0	14	0
SDSU and UCSD	Female	35	2	0	0	3	0	27	3
Engineering Sciences:	Male	3	0	0	0	0	0	2	1
SDSU and UCSD	Female	0	0	0	0	0	0	0	0
Engineering									
Mathematics:	Male	13	5	1	0	2	0	5	0
CSULB and Claremont	Female	0	0	0	0	0	0	0	0
Public Health:	Male	1	0	0	0	0	0	0	1
SDSU and UCSD	Female	2	0	0	0	0	0	0	2
Total Number	Male	112	18	3	0	13	0	68	10
	Female	163	9	8	1	9	0	128	8
	Total	275	27	11	1	22	0	196	18
Total Percent	Male	100 0%	16 1%	2 6%	0 0%	11.6%	0 0%	60 7%	8.9%
	Female	100 0	5 5	4 9	0 6	5.5	0 0	78.5	4.9
	Total	100 0	9 8	4.0	0 3	8 0	0 0	71 3	6 5

Source: Office of the Chancellor, The California State University

the programs in professional education, the nine Latino women were in chemistry and, as noted, clinical psychology as well as education

No Native American and only one Filipino woman were reported among the 274 students in Fall 1990, with that woman being in the education program with the Claremont Graduate School

Gender and racial-ethnic background of degree recipients

The gender and racial-ethnic backgrounds of the joint programs' degree recipients is shown in Display 6 on page 14 for the six programs that have awarded degrees from 1980 through 1989-90. Gender was recorded for all degree recipients, and 66

DISPLAY 6 *Gender and Race/Ethnicity of Joint Doctoral Degree Recipients, 1980-81 Through 1989-90, by Program, and First Year Offered*

<u>Race/ Ethnicity</u>	<u>Gender</u>	<u>Chemistry SDSU and UCSD 1965</u>	<u>Special Education. SFSU and UCB 1967</u>	<u>Special Education. CSULA and UCLA 1968</u>	<u>Ecology SDSU and UCSD 1970</u>	<u>Education SDSU and Claremont 1978</u>	<u>Biology SDSU and UCSD 198</u>	<u>Total</u>
Asian/Pacific Islander	Male	1	0	0	0	1	0	2
	Female	0	2	1	0	0	0	3
Black	Male	0	0	0	0	0	0	0
	Female	0	0	1	0	1	0	2
Filipino	Male	0	0	0	0	0	0	0
	Female	0	0	0	0	0	0	0
Latino	Male	0	0	0	0	3	0	3
	Female	0	1	1	0	2	0	4
Native American	Male	1	0	0	0	0	0	1
	Female	0	0	0	0	0	0	0
White	Male	2	1	2	3	5	3	16
	Female	1	12	11	0	16	1	41
Unknown	Male	9	3	0	7	2	1	22
	Female	4	13	0	2	8	1	28
Total	Male	13	4	2	10	11	4	44
	Female	5	28	14	2	27	2	78
	Total	18	32	16	12	38	6	122

Source Office of the Chancellor, The California State University

percent were women, compared with 59 percent of the enrollees in Fall 1990. Racial-ethnic identity was recorded for only 61 percent of the degree recipients in this group, or 72 of the 118 awardees. Among those degree recipients whose racial-ethnic identity was recorded, 79 percent or 57 of the 72 were White. Degree recipients include at least one person from each racial-ethnic group except Filipino, but no joint degrees were awarded during this period to Black men or Native American women. The group includes 45 students who entered the program before Fall 1980 who are not included in Display 6 that compares numbers of entrants and graduates since Fall 1980.

Program productivity

Little is known about the students who had enrolled in the programs but did not appear on the State University's lists of graduates through 1991 -- whether they were still enrolled, inactive, "all but dissertation," or the like -- and thus measures of the programs' "productivity" or graduation rates may be inadequate. Yet Display 7 offers some evidence of program productivity by relating the numbers of new students by program each year from 1980-81 through 1988-89 and the numbers in each annual group of entrants who received their doctorate through 1990-91. Only seven programs had produced degree recipients by 1990-91, and no students who enrolled after 1988-89 had received their de-

DISPLAY 7 *Numbers of Students Entering Since 1980-81 and Receiving Joint Doctoral Degrees by 1990-91 by Program and Year First Offered*

<u>Year of Entry</u>	<u>Status</u>	Chemistry SDSU and UCSD <u>1965</u>	Special Education SFSU and UCB <u>1967</u>	Special Education CSULA and UCLA <u>1968</u>	Ecology SDSU and UCSD <u>1970</u>	Education SDSU and Claremont <u>1978</u>	Biology SDSU and UCSD <u>1984</u>	Clinical Psychology SDSU and UCSD <u>1985</u>	<u>Total</u>
1980-81	Entry	3	6	5	5	17			36
	Graduated	2	3	2	2	3			12
1981-82	Entry	0	5	9	4	16			34
	Graduated	0	3	4	2	6			16
1982-83	Entry	4	5	4	3	16			32
	Graduated	4	2	0	2	6			14
1983-84	Entry	4	7	4	3	14			32
	Graduated	3	2	4	2	5			19
1984-85	Entry	3	8	3	0	16	4		34
	Graduated	2	2	1	0	6	4		15
1985-86	Entry	4	8	0	3	12	4	8	31
	Graduated	1	0	0	0	5	1	7	7
1986-87	Entry	4	8	3	3	13	4	9	35
	Graduated	0	0	0	0	0	1	2	2
1987-88	Entry	3	5	3	1	12	4	8	36
	Graduated	0	2	0	0	0	0	0	2
1988-89	Entry	2	5	6	4	14	6	9	46
	Graduated	0	0	0	0	1	0	0	1
Total									
Through 1986-87	Entry	27	57	37	26	130	22	34	280
	Graduated	13	19	11	8	33	6	9	97

Source: Office of the Chancellor, The California State University

gree two years later -- hence the cutoff in displaying students entering after 1988-89.

As noted earlier, an additional 45 students earned their doctorates during the 1980s but they are excluded from Display 7 because of uncertainty about the dates of entry before 1980-81. In any case, 280 students entered one of seven doctoral programs between 1980-81 and 1988-89, and 97 had earned their degree by 1990-91. As can be seen in Display 8 on page 16, time to degree varies among the programs and the latter years presented in Display 7 may be expected to yield additional degree recipi-

ents in the next few years. During the five-year period when most of the degrees were awarded, the percentage of completers ranged from 30.6 for the class entering in 1980-81 to 53.1 for the 1983-84 entrants, with a mean of 34.6.

The largest ratio of new students to degrees awarded is for the program in chemistry that the two University campuses in San Diego have offered since 1965 -- 27 new students in classes beginning in 1980-81 and 13 degrees awarded through 1990-91, for a yield of 48.1 percent.

Time to degree

As noted earlier, Display 8 below provides information about the lapsed time to the degree for students completing their joint doctoral program between 1980-81 and 1990-91. The programs require different kinds of preparation for admission and varying amounts of time to complete, some of which will be discussed subsequently. In any case, about one-fourth of the degree recipients spent no more than three years in the program, and an additional 39.3 percent completed their programs within four or five years of admission. Fewer than 10 percent needed more than seven years and there is no information about whether these students were continuously enrolled in these programs during the time or whether they had left for significant periods of time. The program in education that San Diego State University and the Claremont Graduate School offer jointly, that yielded the smallest number of degree recipients relative to new entrants, is among the most efficient in terms of time to the degree, with 41.9 percent of the degree recipients graduating within three years and 76.7 percent within five years. Students in the programs in special educa-

tion are reported to spend more time in their programs, probably because of a requirement of clinical or internship experience.

Institutions last attended

Display 9 shows the types of institutions from which students in the several programs earned their baccalaureate and master's degrees. The information is relevant to questions of access: are the joint programs drawing students whose prior degrees are from the State University system? From the campus that offers the doctoral degree program? From out-of-state institutions?

Of the 476 joint doctoral students who enrolled during the past decade, 59.9 percent entered with earned master's degrees. The largest number -- 112 or 39.3 percent -- received their master's from the State University campus where they were enrolled for the doctoral program. The second largest group of students (82 or 28.8 percent), earned their master's degrees from out-of-state institutions. The State University system awarded 52.3 percent of

DISPLAY 8 *Time to Degree for Students Graduating Between 1980-81 and 1989-90 by Program and First Year Offered*

Years to Degree	Chemistry SDSU and UCSD 1965	Special Education SFSU and UCB 1967	Special Education, CSULA and UCLA 1968	Ecology SDSU and UCSD 1970	Education SDSU and Claremont 1978	Biology SDSU and UCSD 1984	Clinical Psychology SDSU and UCSD 1985	Total
More than 9			1		1			2
9	1	1	1		0			3
8	2	2	3		1			8
7	2	4	4	4	3			17
6	3	7	5	1	5		3	21
5	1	5	3	4	8	1	6	25
4	5	8	1	3	7	2		32
3	6	8			12	3		29
2	1				6			7
1	<u>1</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>1</u>
Total	22	35	18	12	43	6	9	145

Source: Office of the Chancellor, The California State University

DISPLAY 9 *Types of Institutions From Which Joint Doctoral Students Received Their Baccalaureate and Master's Degrees, by Program, 1980-81 Through 1990-91*

<u>Program</u>	<u>Number of Entrants</u>	<u>Degree Awarded</u>	<u>Type of Institution Awarding Degree</u>							
			<u>Same CSU Campus</u>	<u>Other CSU Campus</u>	<u>Same UC Campus</u>	<u>Other UC Campus</u>	<u>Independent California Institution</u>	<u>Out of State Institution</u>	<u>Out of Country Institution</u>	<u>Unknown or None</u>
Chemistry: SDSU and UCSD	31	Bachelor	4	0	4	1	1	11	9	1
		Master	1	0	0	1	1	1	3	24
Special Education: SFSU and UCB	77	Bachelor	8	8	3	9	8	35	2	4
		Master	21	14	4	2	7	23	1	5
Special Education: CSULA and UCLA	41	Bachelor	4	9	4	0	3	13	0	8
		Master	9	9	1	0	3	7	0	12
Ecology: SDSU and UCD	32	Bachelor	1	2	1	5	0	13	9	1
		Master	1	0	1	2	0	4	5	19
Education: SDSU and Claremont	163	Bachelor	25	5	--	18	11	46	5	53
		Master	60	9	--	9	6	36	1	42
Biology: SDSU and UCSD	28	Bachelor	4	3	2	7	1	9	2	0
		Master	1	0	0	0	0	1	0	26
Clinical Psychology: SDSU and UCSD	58	Bachelor	4	6	9	13	6	18	2	0
		Master	0	1	0	1	1	3	0	52
Engineering Sciences SDSU and UCSD	10	Bachelor	4	0	1	1	1	1	2	0
		Master	1	0	0	0	0	2	1	6
Engineering Mathematics: CSULB and Claremont	20	Bachelor	5	7	--		0	4	2	0
		Master	12	2	--	0	2	1	0	3
Public Health SDSU and UCSD	10	Bachelor	1	2	2	1	1	2	0	1
		Master	5	1	0	0	1	2	1	0
Geography: SDSU and UCB	6	Bachelor	1	0	1	0	1	2	1	0
		Master	1	1	0	0	0	2	0	2
Total Number	476	Bachelor	61	42	27	57	33	154	34	68
		Master	112	37	6	15	21	82	12	191

Source Office of the Chancellor, The California State University

the master's degree. Only 7.4 percent received master's degrees from the University of California -- six from the campus that is cooperating in the joint doctoral program. The remaining students received their master's degree from independent California colleges and universities (7.4 percent or 15) while 4.2 percent or 12 students earned master's degrees from out-of-country institutions.

The systemwide profile is weighted heavily by the program in education that San Diego State University and the Claremont Graduate School offer cooperatively, which 72.4 percent of the 163 students entered with a master's degree. Among these students, 49.6 percent entered with degrees earned from San Diego State, 5.9 percent from Claremont, and 29.8 percent from out-of-state institutions.

Other programs that have been enrolling students with master's degrees from the State University campus offering the joint doctorate are the two in special education, in which at least as many students had earned master's degrees from out-of-state institutions, and the relatively new program in engineering mathematics. Programs which a minority of the students entered without a master's degree in the 1980s are chemistry, ecology, biology, clinical psychology, and engineering sciences

An analysis of the baccalaureate degree achievement of the new joint doctoral students shows that 14.3 percent of the 476 graduated from an out-of-country institution with a different kind of degree or did not have the institution recorded. Among those with recorded degrees, the largest number -- 32.6 percent -- earned degrees at out-of-state institutions, followed by 12.8 percent from the State University offering the doctoral program or 21.6 percent from the State University system, 5.7 percent from the same University campus involved in the cooperative program or 17.6 percent from the University system, 7.0 percent from an independent California institution, and 7.1 percent from an institution in another country

The programs that enrolled the largest percentages of students with baccalaureate degrees from out-of-state institutions, compared with California colleges and universities, are the three in professional education and in ecology. The programs in ecology and chemistry also enrolled the largest numbers of graduates of institutions from other countries. In fact, 22 of the 32 new students in ecology and 20 of the 31 new students in chemistry in the 1980s received their baccalaureate degrees from institutions in other states or countries and only four students in ecology and three in chemistry held master's degrees from California institutions. The results of the analysis need to be interpreted with

caution since students from out-of-state who earn a jointly conferred doctoral degree may remain in California to teach or engage in other professional work but the data may also indicate that graduates of California's colleges and universities are taking only limited advantage of some joint doctoral programs.

Job placement after attainment of the degree

Display 10 shows the first job placement of the doctoral-degree recipients who completed their programs between 1979-80 and 1989-90. Placements are shown separately for the 86 recipients of degrees in the three programs in education and the 36 recipients of degrees in the three science-related fields

For all fields combined, the largest number of placements -- 30.3 percent -- were in the State University system, more often than not on the campus that awarded the joint degree. An additional 6.6 percent took jobs in the University of California system and 7.4 percent in independent California colleges and universities. Institutions in other states and countries employed 11.5 percent of the new degree holders. All told 63.9 percent of the joint doctoral degree recipients took jobs in education as their first placement after the degree -- 70.9 percent of those whose degrees were in education and 47.2 percent of those with degrees in other fields.

The remaining degree recipients held jobs in business and industry, health-related fields -- often research, or in research and consulting organizations. Most appeared to remain in California to work while some took jobs with corporations in other states

DISPLAY 10 First Job Placement After Receipt of Degree, 1980-1990

<u>Placement</u>	<u>Degree in Education</u>	<u>Other</u>	<u>Total</u>
Same State University Campus as Degree	19	4	23
Same University of California Campus as Degree	1	3	4
Other State University Campus	14	0	14
Other University of California Campus	4	0	4
California Community College	2	1	3
Independent California College or University	8	1	9
Out-of-State College or University	5	5	10
Out-of-Country College or University	1	3	4
California Public School	5	0	5
California Private School	1	0	1
Out-of-State School	1	0	1
California Government	0	1	1
Federal Government	1	1	2
Business/Industry	2	7	9
Health-Related Agency	5	3	8
Research/Consulting	0	4	4
Self-Employed	5	0	5
Other Placement	2	0	2
Unknown	<u>10</u>	<u>3</u>	<u>13</u>
Total	86	36	122

Source Office of the Chancellor, The California State University.

4 *Characteristics of Current Programs*

THIS SECTION of the report lists by year established the 11 joint doctoral programs now in operation between the California State University and cooperating universities for which some data exist, and it offers a brief description of each program and its characteristics.

Chemistry

- Cooperating institutions: San Diego State University and the University of California, San Diego
- Date when first offered: 1965
- Numbers enrolled: 1980-1990, 31 students (No new students shown for Fall 1990 or 1991)
- Gender and race/ethnicity of most recent enrollees (Fall 1990):

<u>Ethnicity</u>	<u>Men</u>	<u>Women</u>	<u>Total</u>
Asian	3	0	3
Black	0	0	0
Filipino	0	0	0
Latino	0	1	1
Native American	0	0	0
White	10	3	13
Unknown	<u>1</u>	<u>0</u>	<u>1</u>
Total	14	4	18

- Number of degrees awarded: 1964-65 through 1989-90: 38; and 1980-81 through 1989-90: 18.
- Institutional origins of students

<u>Institution</u>	<u>Bachelor's</u>	<u>Master's</u>
San Diego State University	4	1
Other State University Campus	0	0
University of California, San Diego	4	0
Other University of California	1	1
Independent California Institutions	1	1
Out-of-State Institutions	11	1
Out-of-Country Institutions	9	3
None	<u>1</u>	<u>0</u>
Total	31	7

This was the first program to be approved as a joint doctoral program under the terms of the Master Plan for Higher Education in California and accepted its first students in 1965 -- the year for which it was approved -- and is on record as awarding a degree that same year. It was the first of five such programs that are offered cooperatively by San Diego State University and the University of California, San Diego, which also offers its own doctorate in chemistry. During the 1980s, 31 new students enrolled in the programs -- three or four per year -- and nine of them received their doctoral degrees during the 1980s, to which must be added nine students who had begun their studies earlier. The most recent enrollees and the degree recipients are predominantly male, White, and Asian, many with baccalaureate degrees from institutions in other states or countries. Although most enter with a baccalaureate degree, two-thirds complete their doctoral degree program in four years or less. Since the program began in 1965, 38 students have been awarded the Ph.D. degree but only 18 have been in the 1980s.

The State University catalog states that applicants for admission to the program should hold a baccalaureate degree in chemistry, with mathematics courses through integral calculus and one year of physics. Students are expected to spend their first year in residence at the University of California, San Diego, and to take their qualifying examination by the end of their fifth semester.

Special Education (San Francisco Bay Area)

- Cooperating institutions: San Francisco State University and the University of California, Berkeley.
- Date when first offered: 1967.
- Numbers enrolled. 1980-81 through Fall 1991: 77 students; and Fall 1991, six new students.

- Gender and race/ethnicity of most recent enrollees (Fall 1990):

<u>Ethnicity</u>	<u>Men</u>	<u>Women</u>	<u>Total</u>
Asian	0	2	2
Black	0	3	3
Filipino	0	0	0
Latino	0	2	2
Native American	0	0	0
White	7	31	38
Unknown	<u>0</u>	<u>0</u>	<u>0</u>
Total	7	38	45

- Number of degrees awarded since 1976-77: 44
- Institutional origins of students:

<u>Institution</u>	<u>Bachelor's</u>	<u>Master's</u>
San Francisco State University	8	21
Other State University Campus	8	14
University of California, Berkeley	3	4
Other University of California Campus	9	2
Independent California Institutions	8	7
Out-of-State Institutions	35	23
Out-of-Country Institutions	2	1
Unknown	<u>4</u>	<u>5</u>
Total	77	77

The first joint doctoral program in special education was approved in 1967 for San Francisco State University and the University of California, Berkeley. It is the only joint doctoral program in which these institutions now participate and students may take work on both campuses at the same time with fees paid to only one. The University also offers a doctoral program in this field. During the 1980s, the joint program enrolled 77 students and awarded 32 degrees -- 18 to students who first enrolled before Fall 1980. The program attracts and graduates many more women than men, at least a few of whom are other than Caucasian. The program has graduated a total of 44 since its establishment in 1967 and enrollments have been increasing gradually during the 1980s -- to 45 in Fall 1990, with six new students in Fall 1991.

Students are expected to enroll with a master's degree and twice as many such degrees were earned in California colleges and universities by students entering in the 1980s as in out-of-state institutions. The State University system -- particularly San Francisco State -- accounted for the largest number

of California degrees. Moving back to the baccalaureate degrees earned by these same students, half were earned in California institutions and half at institutions in other states and countries.

In addition to holding a master's degree, applicants to the program are expected to have earned "satisfactory" undergraduate and graduate grade-point averages and Graduate Record Examination scores, be interviewed, and have experience in the field, if possible. The State University catalog says that students should expect to take three or four years to complete the program, including two years of full-time enrollment and an internship, but the 32 degree recipients during the 1980s took up to nine years to complete the program -- with fewer than half completing it in three or four years.

Special Education (Los Angeles)

- Cooperating institutions: California State University, Los Angeles, and the University of California, Los Angeles
- Date when first offered: 1968
- Numbers enrolled: 1980-81 through 1990-91: 41 students; and Fall 1990. Four new students.
- Gender and race/ethnicity of most recent enrollees (Fall 1990):

<u>Ethnicity</u>	<u>Men</u>	<u>Women</u>	<u>Total</u>
Asian	0	2	2
Black	0	1	1
Filipino	0	0	0
Latino	1	0	1
Native American	0	0	0
White	2	15	17
Unknown	<u>0</u>	<u>0</u>	<u>0</u>
Total	3	18	21

- Number of degrees awarded through 1989-90: 30.
- Institutional origins of students:

<u>Institution</u>	<u>Bachelor's</u>	<u>Master's</u>
California State University, Los Angeles	4	9
Other State University Campus	9	9
University of California, Los Angeles	4	1
Other University of California	0	0
Independent California Institutions	3	3

Out-of-State Institutions	13	7
Out-of-Country Institutions	0	0
Unknown	<u>8</u>	<u>12</u>
Total	41	41

The second program in special education was approved one year later -- in 1968 -- for offering by California State University, Los Angeles, and the University of California, Los Angeles, which also offers its own doctorate in this field. Enrollments in the 1980s have been about half the size of those of the joint program in northern California, with 41 new students enrolled and 16 degrees granted during the 1980s -- seven of them to students who first enrolled before Fall 1980. Like the first program, the students and the graduates are predominantly women, with few non-White students or graduates. Enrollments in the last six years have been smaller than in the early 1980s and the number of new enrollees appears to vary from year to year from one in 1989-90 to eight in 1981-82.

Students coming into the program are expected to hold a master's degree in special education or an allied field. Information about the source of these degrees is incomplete for students entering during the past decade but it appears that at least 60 percent held a master's from the California State University system (half from Los Angeles State) and about one-fourth from out-of-state institutions. About 40 percent of the baccalaureate degrees earned by these same students were awarded by the California State University and another 40 percent by out-of-state institutions.

The State University catalog states that a "normal" program takes four years from the start of coursework to advancement to candidacy, and four years for the dissertation research. However, only four of the 16 students who earned the doctoral degree in the 1980s took eight or more years to do so, and four completed work in less than six years. The small number of degrees granted does not lead to generalization about time to the degree and only 21 have been awarded since the program began in 1968.

Admission to the program is based on (1) a grade-point average of 3.0 in all upper-division work and 3.5 in all post-baccalaureate work; (2) a Graduate Record Examination score of at least 1,000, (3) evidence of research capability, and (4) recommendations from two graduate faculty members and one field supervisor. Students are expected to take

about half their work on each of the two campuses, including three quarters in full-time attendance on each. The program also includes a three-term sequence in a research practicum.

Ecology

- Cooperating institutions: San Diego State University and the University of California, Davis
- Date when first offered: 1970
- Numbers enrolled: 1980-1990, 32 students; and Fall 1990, four new students.
- Gender and race/ethnicity of most recent enrollees (Fall 1990):

<u>Ethnicity</u>	<u>Men</u>	<u>Women</u>	<u>Total</u>
Asian	1	0	1
Black	0	0	0
Filipino	0	0	0
Latino	1	0	1
Native American	0	0	0
White	9	4	13
Unknown	<u>4</u>	<u>0</u>	<u>4</u>
Total	15	4	19

- Number of degrees awarded through 1989-90: 14
- Institutional origins of students:

<u>Institution</u>	<u>Bachelor's</u>	<u>Master's</u>
San Diego State University	1	1
Other State University Campus	2	0
University of California, Davis	1	1
Other University of California Campus	5	2
Independent California Institutions	0	0
Out-of-State Institutions	13	4
Out-of-Country Institutions	9	5
None	<u>1</u>	<u>0</u>
Total	32	13

The next program to be approved is in ecology, beginning in 1970, and involving the biology department at San Diego State University and the "graduate group in ecology" at the University of California, Davis. The program was originally authorized in cooperation with the Riverside campus of the University but was moved to the Davis campus. The program had an enrollment of 32 students during the 1980s, with up to 4 new students enrolling

each year. Seven students who began their program during this period had received their degree by 1989-90, together with one student who had started earlier. Enrollment in Fall 1990 was 19 students -- a slow increase since the 11 enrollees in 1980-81. The 19 included 15 men and 4 women, with one Asian/Pacific Islander and one Latino man. The degree recipients whose racial-ethnic composition was reported were all White men. There have been 14 graduates since the program began in 1970.

The program does not require a master's degree for admission but 13 of the 32 enrollees during the 1980s had earned such a degree. Four were from institutions in other states and five from other countries, with only one from San Diego State University. Baccalaureate degree attainment shows a similar pattern: 13 are from out-of-state and 9 from out-of-country institutions. The Davis campus catalog makes no reference to the joint degree but notes that students in its own doctoral program in ecology take a "normative" time of five years to complete the requirements. Four of the eight students who earned the joint doctorate in ecology in the 1980s took six or seven years to do so, while two took only four years.

Students seeking admission to the program must have (1) a baccalaureate degree in ecology, chemistry, physics, or mathematics; (2) a "satisfactory" grade-point average; (3) a "satisfactory" score on the Graduate Record Examination Advanced Test in Biology; and (4) recommendations. The required courses in the program may be taken on either campus but students must enroll full-time for one year on each campus.

Education with a Multicultural Focus

- Cooperating institutions: San Diego State University and Claremont Graduate School.
- Date when first offered: 1978
- Numbers enrolled: 1980-91, 163 students, and Fall 1990, 13 new students.
- Gender and race/ethnicity of most recent enrollees (Fall 1990):

<u>Ethnicity</u>	<u>Men</u>	<u>Women</u>	<u>Total</u>
Asian	4	3	7

Black	0	4	4
Filipino	0	1	1
Latino	7	3	10
Native American	0	0	0
White	12	40	52
Unknown	<u>2</u>	<u>3</u>	<u>5</u>
Total	25	54	79

- Number of degrees awarded through 1989-90: 38.
- Institutional origins of students:

<u>Institution</u>	<u>Bachelor's</u>	<u>Master's</u>
San Diego State University	25	60
Other State University Campus	5	9
University of California	18	9
Claremont	0	2
Other Independent California Institution	11	4
Out-of-State Institutions	46	36
Out-of-Country Institutions	5	1
Unknown	<u>53</u>	<u>0</u>
Total	163	121

Education with a Multicultural Focus was the first joint program involving an independent institution and was approved for San Diego State University and the Claremont Graduate School in 1978. The multicultural focus refers to the program's intent to attract students from diverse racial/ethnic groups, rather than a curricular emphasis since it offers seven areas of specialization within the broad field of education. During the 1980s, 163 students enrolled in the program -- more than twice the number in any of the other programs. The enrollment has grown from 34 in 1980-81 to 79 in Fall 1990, and 13 new students were enrolled in 1990-91. Among the students who began their programs in the 1980s, 28 had received their degree by 1989-90, to which should be added 10 students who began earlier but completed in the 1980s. There are more than twice as many women as men in the program and the gender ratio for degrees granted in the 1980s was 2.5 to 1. About half the men in the program are Asian/Pacific Islander or Latino, as were the graduates whose ethnicity was reported. About one out of five women in the program was non-White (including four Black women) but the large number of graduates whose ethnicity was not reported discourages analysis of this group. All of the degrees have been awarded since 1980.

Students are expected to have completed a master's degree in education before entering the program.

However, master's degrees were reported for only 74.2 percent of the 163 students who enrolled in the 1980s. San Diego State University had conferred half of those degrees, followed by institutions in other states and countries. Information is not available for about one-third of the baccalaureate degrees that the doctoral students held. Of those reported, more came from out-of-state institutions than the California State University system. The 38 students who completed their degrees in the 1980s, 17 did so in two or three years -- the modal number for the group being three years. None took more than seven years. Thus, while degree production seems somewhat low, the efficiency of the completers appears high.

The San Diego State University catalog says that applicants to the program should have (1) "satisfactory" Graduate Record Examination scores, (2) experience, (3) a 1,000 word personal statement, (4) an interview, and (5) three letters of recommendation, in addition to a master's degree. The curriculum provides an opportunity for students to "explore the effects of culture on learning and teaching and to investigate ways to meet the needs of all students in a pluralistic society." Students must earn a minimum of 48 semester hours in residence -- 24 on each campus.

Biology

- Cooperating institutions: San Diego State University and the University of California, San Diego
- Date when first offered: 1984.
- Numbers enrolled: 1984-1991, 28 students; and Fall 1990, three new students.
- Gender and race/ethnicity of most recent enrollees (Fall 1990): five Asian men, seven White men, eight White women, and one man whose ethnicity is unknown.
- Number of degrees awarded through 1989-90. 6
- Institutional origins of students:

<u>Institution</u>	<u>Bachelor's</u>	<u>Master's</u>
San Diego State University	4	1
Other State University Campus	3	0
University of California, San Diego	2	0
Other University of California Campus	7	0

Independent California Institutions	1	0
Out-of-State Institutions	9	1
Out-of-Country Institutions	<u>2</u>	<u>0</u>
Total	28	2

The next program for which San Diego State University and the University of California, San Diego, received approval is biology -- first offered in 1984-85. Since that time, 28 students have been enrolled and six degrees have been granted. Three new students were enrolled in 1990-91, bring the total enrollment to 21 for that fall term. The 21 students include 13 men and 8 women -- the women being White and the men comprising five Asian and seven White (one unknown). To date, degree recipients have all been White students or with unknown ethnicity. Half the students completed their program in three years and half in four or five. Only two students enrolled with a master's degree and the largest number with a baccalaureate degree came from institutions in other states or countries (11 students), with the remainder awarded by California colleges and universities. It is interesting that more of the baccalaureate degrees were held by University than State University graduates (nine and seven, respectively) since the University at San Diego also has a doctoral program in biology.

Admission to the program requires: (1) a baccalaureate degree with preparation in biology, chemistry, mathematics, and physics; (2) a "satisfactory" grade-point average; (3) "satisfactory" Graduate Record Examination scores, including a score for biology, chemistry, or physics; and (4) three letters of recommendation. Degree requirements include at least one year in full-time residence on each campus and four laboratory rotations.

Clinical Psychology

- Cooperating institutions: San Diego State University and the University of California, San Diego
- Date when first offered: 1985.
- Numbers enrolled: 1985-1991, 58 students; and Fall 1991, 12 new students
- Gender and race/ethnicity of most recent enrollees (Fall 1990)

<u>Ethnicity</u>	<u>Men</u>	<u>Women</u>	<u>Total</u>
Asian	0	2	2
Black	2	0	2
Filipino	0	0	0
Latino	2	3	5
Native American	0	0	0
White	14	27	41
Unknown	<u>0</u>	<u>3</u>	<u>3</u>
Total	17	35	52

- Number of degrees awarded through 1989-90: 0.
- Institutional origins of students:

<u>Institution</u>	<u>Bachelor's</u>	<u>Master's</u>
San Diego State University	4	0
Other State University Campus	6	1
University of California, San Diego	9	0
Other University of California Campus	13	1
Independent California Institutions	6	1
Out-of-State Institutions	18	3
Out-of-Country Institutions	<u>2</u>	<u>0</u>
Total	58	6

This program -- authorized for San Diego State University and the University of California, San Diego, in 1985 -- is one of the largest and surely the fastest growing of the State University's joint doctoral programs. One reason for its growing enrollment may be that only the Davis campus of the University offers a doctoral degree in this field. No joint degree had been awarded through 1989-90 but this is not surprising since students enter with only a baccalaureate degree in most instances. During its six years, the program has enrolled 58 students including 12 new students in 1990-91 and with a Fall 1990 enrollment of 52. The ratio of women to men in the program is two to one and more than 80 percent of the current students are White. The remainder include two Asian/Pacific Islander women, two Black men, two Latino men, and three Latino women.

Somewhat surprising is the finding that only four of the 58 students enrolled to date earned their baccalaureate degree at San Diego State University and only six elsewhere in the State University system. On the other hand, 22 students had baccalaureate degrees from the University (nine from the San Diego campus) and six from independent colleges and universities. The largest single group (18) received their baccalaureate degree from institutions in other states and two from other countries.

Admission requirements include: (1) a baccalaureate degree with a grade-point average of at least 3.25 in the last 60 hours of work; (2) a minimum total score of 1,100 on the Graduate Record Examination; (3) a score above the 85th percentile on the Advanced Test in Psychology; (4) at least 18 semester hours of prescribed psychology courses, and (5) a personal interview. Students are expected to enroll year-round, take a two-year core curriculum, and have 300 hours of supervised clinical experience. The catalog states that a project that is required in the second year is similar to a master's degree thesis. Students normally will take five years to complete the program, with the dissertation to be submitted and defended in the fourth year and completed in the fifth year, with a full-time internship. Three specializations are offered -- behavioral medicine, neuropsychology, and experimental psychopathology. Evidence of the drawing power of the program may be inferred from the increase in applicants from 91 in 1985-86 to 240 in 1989-90, from which 14 were admitted and 12 enrolled in the most recent year.

Engineering Sciences / Applied Mechanics

- Cooperating institutions: San Diego State University and University of California, San Diego.
- Date when first offered: 1989
- Numbers enrolled: 1989-1991, 10 students; and Fall 1991, five new students (enrollment unverified).
- Gender and race/ethnicity of most recent enrollees (Fall 1990): three men -- two White and one unknown
- Number of degrees awarded through 1989-90: 0
- Institutional origins of students

<u>Institution</u>	<u>Bachelor's</u>	<u>Master's</u>
San Diego State University	4	1
University of California, San Diego	1	0
University of California, Berkeley	1	0
Independent California Institutions	1	0
Out-of-State Institutions	1	2
Out-of-Country Institutions	<u>2</u>	<u>1</u>
Total	10	4

San Diego State University and the University of California, San Diego, began offering this joint program in 1989 when one student enrolled. Four new students enrolled in 1990-91 and five new students are believed to have enrolled in Fall 1991. All are male and White with the exception of two Asian/Pacific Islanders who earned their baccalaureate degrees at institutions in China and on Taiwan.

Admission is with either a baccalaureate or a master's degree and four of the ten who have enrolled to date hold both. San Diego State accounts for four of the ten students with baccalaureate degrees; the University of California, two; Cal Tech, one; and institutions in other states and countries, three.

Applicants are expected to have a grade-point average of at least 3.0 in the major if they enter with a baccalaureate degree or 3.4 if they enter with a master's. They must also present satisfactory Graduate Record Examination scores, including a score of at least 715 on the quantitative section. The residency requirement is one year full-time on each campus, and students who enter with only a baccalaureate degree may expect to be enrolled full-time for four or five years to complete the degree. Applicants without an appropriate degree in engineering may be admitted but must make up deficiencies.

Engineering Mathematics

- Cooperating institutions: California State University, Long Beach, and Claremont Graduate School
- Date when first offered: 1990
- Numbers enrolled: 1990-91, 20 new students
- Gender and race/ethnicity of most recent enrollees (Fall 1990): five Asian males, one Black male, two Latino males, five White males, and seven unknown.
- Number of degrees awarded: 0.
- Institutional origins of students

<u>Institution</u>	<u>Bachelor's</u>	<u>Master's</u>
California State University, Long Beach	5	12
Other State University Campus	7	2
University of California	2	0
Claremont Graduate School	0	0

Other Independent California Institutions	0	2
Out-of-State Institutions	4	1
Out-of-Country Institutions	2	0
None	<u>0</u>	<u>3</u>
Total	20	20

This is the first joint doctoral program to be offered by California State University, Long Beach, in cooperation with the Claremont Graduate School. It began in 1990 and enrolled its first students in the fall term with an initial enrollment of 13 male students that included five Asian/Pacific Islanders, one Black, and two Latino students. A majority of the students hold a master's degree from a California institution.

No information about the program is contained in the 1990-91 State University catalog. The Claremont Graduate School's catalog describes the program as interdisciplinary and expects entering students to hold a degree in mathematics with an emphasis on computer applications.

Public Health

- Cooperating institutions: San Diego State University and University of California, San Diego.
- Date when first offered: 1990
- Numbers enrolled: 1990-91, 10 students; and Fall 1991, seven new students (enrollment unverified)
- Gender and race/ethnicity of most recent enrollees (Fall 1990): two men, three women (race/ethnicity unknown)
- Number of degrees awarded through 1989-90: 0.
- Institutional origins of students:

<u>Institution</u>	<u>Bachelor's</u>	<u>Master's</u>
San Diego State University	1	5
Other State University Campus	2	1
University of California, San Diego	2	0
Other University of California Campus	1	0
Independent California Institutions	1	1
Out-of-State Institutions	2	2
Out-of-Country Institutions	0	1
None	<u>1</u>	<u>0</u>
Total	10	10

This program begun in 1990 by San Diego State University and the University of California, San Diego, is in public health epidemiology. It is offered through the University's Department of Community and Family Medicine and the State University's Graduate School of Public Health. Three students were enrolled the first year and seven new students whose registration has not been verified the second year. Information about their racial-ethnic composition is unavailable, but the first classes include the same number of men and women.

Although the master's degree is not required for admission, all but one student entered with this degree. Five were awarded by San Diego State in Public Health or Microbiology, one from San Jose State and three from institutions in other states or countries. The stated admission requirements are (1) a baccalaureate degree with a focus on quantitative methodology and biological science, (2) a grade-point average of at least 3.0 in the last 60 semester units; and (3) satisfactory Graduate Record Examination scores.

Geography

- Cooperating institutions: San Diego State University and University of California, Santa Barbara.
- Date when first offered: 1991
- Numbers enrolled: 1990-91, six students; and Fall 1991, five new students (enrollment unverified).
- Gender and race/ethnicity of most recent enrol-

lees (Fall 1991): two men, three women (race/ethnicity unknown)

- Number of degrees awarded through 1989-90: 0
- Institutional origins of students:

<u>Institution</u>	<u>Bachelor's</u>	<u>Master's</u>
San Diego State University	1	1
California State University, Fullerton	0	1
University of California, Santa Barbara	1	0
Independent California Institutions	1	0
Out-of-State Institutions	2	2
Out-of-Country Institutions	<u>1</u>	<u>0</u>
Total	6	4

This joint doctoral program -- approved in 1991 -- is offered by San Diego State University in cooperation with the University's Santa Barbara campus. New student enrollment through the Fall 1991 term is probably six -- two men and four women, three of whom earned a master's degree at a California State University campus, two from out-of-state institutions, and one (a bachelor's degree) from a German university.

Applicants for admission are expected to (1) hold a master's degree with work in statistics, mathematics, and computer science, (2) have earned a grade-point average of at least 3.25 in their last 60 hours of work at the baccalaureate or 3.5 at the master's degree level, (3) present a Graduate Record Examination combined score of at least 1,100, and (4) submit an essay on the subject of why they are seeking a doctoral degree. Students spend their first, full-time year of residence at San Diego State, the second at the Santa Barbara campus of the University, and their remaining time at San Diego State.

5

Issues for Consideration

THE COMMISSION'S study of California's joint doctoral programs has led to this statement of nine issues for further discussion and action

1. State-level oversight

The awarding of doctoral degrees jointly with other California universities has been a part of the mission of the California State University since the early 1960s; still, this rather unique program is in a sense in the developmental stage because of the uneven history of State funding and enrollments. Given this status, there needs to be increased system-level oversight of the programs by the California State University, once approval for the program has been granted and students begin to enroll in order to provide information about enrollments, degrees awarded, costs, and student characteristics that can be used in program evaluation

2. Financing

Despite over 25 years of experience with joint doctoral programs and repeated requests from State agencies, the California State University still has no basis on which to estimate the costs associated with conducting these doctoral programs, just as the University of California cannot provide disaggregated estimates of the costs associated with its various educational programs.

This gap in understanding the financing of joint doctoral programs carries important implications for both the revenue and expenditure sides of the budget equation.

- With regard to revenues, without knowing the amount of State General Funds needed to support these programs, the State has no basis on which to assess whether it is over- or under-funding them. This has serious budget implications because if joint doctoral programs are being over-

funded, potential savings would be associated with recalibration. If, on the other hand, they are being underfunded, then concerns are raised that maintenance of quality in these programs requires that funds intended for other aspects of the State University's mission be diverted to support the joint doctorate

- On the expenditure side of the equation, it is critical for the State to know the total expenditures needed (from all fund sources) to carry out the joint doctoral programs, because without such information it is impossible to assess the relative cost-effectiveness of these programs compared to other means of providing advanced educational services. While data limitations make it impossible to address these issues any more definitively in this report, the Commission intends to examine these questions more closely as it proceeds with both its study of financing higher education in California and its comprehensive study of graduate education planning

The question of cost to the student is also unanswered by currently available data, since the cooperating institutions charge vastly different fees and the amount of time that students in different programs spend on each campus is unclear, as is their time to degree. Students enrolling in the new program in educational leadership that is offered jointly by California State University, Fresno, and the University of California, Davis, are expected to be able to complete their entire program in Fresno, paying State University fees when taking courses from the State University and University of California fees for one year of full-time residence. Some other programs require students to fulfill residency requirements on two quite distant campuses, thus increasing costs to both them and their advisors

3. Statewide and intersegmental enrollment planning

Both the University and the State University peri-

odically issue new graduate enrollment plans, and a Joint Graduate Board of the two segments has been meeting since the 1960s to exchange information and ideas. The State University's five-year academic plan seems to be primarily a compilation of campus-originated proposals for new joint doctoral programs that require system-level approval for development. Procedures for developing joint doctoral programs are of course grounded in campus-to-campus negotiations in proposing and planning new programs, but they appear to be accompanied by little State-level attention to statewide needs and resources

The joint doctoral degree program is an obvious focus for cooperative efforts on the part of the two public systems, but such activity also needs to involve California's independent universities. Coordinated planning also needs to focus on graduate enrollments that begin at the master's degree level, as well as on doctoral and professional degree programs. There appears to be a need for a much more comprehensive process or strategy for coordinated, cooperative planning of post-baccalaureate education that articulates programs at different levels as well as maximizes the joint use of resources

4. Student access

A major purpose of joint doctoral programs is to increase access to the doctorate for California residents who are virtually excluded from University programs because of place of residence, financial situation, or other circumstances. As important, if not more so, is the flexibility afforded by these programs for students who are unable to attend classes scheduled primarily during the day. Generally, the joint doctoral programs have been developed by State University campuses in urban areas with a campus of the University of California or, in the case of Long Beach, a relatively nearby independent institution -- the Claremont Graduate School.

The record appears to be somewhat mixed in regard to increased access to the doctorate for women and underrepresented racial-ethnic groups. Although the proportion of joint doctoral degrees that are awarded to women is high, they are concentrated in a few fields, most notably education. Few Black, Filipino, Latino, or Native American students have

earned a joint doctorate, regardless of their field of study

5. Job placement

This issue involves placement after the doctoral degree and whether the joint doctoral programs are enlarging the pool of candidates for faculty and administrative positions, and whether a purpose of the programs should be career development for those who are already employed. The programs are producing graduates who work in educational institutions, as well as for government and private industry, in health-related and other occupations, and as self-employed professionals. An issue to be explored further is the extent to which these programs, as well as all doctoral programs, are contributing to the replenishment and diversification of the future academic workforce -- a critical priority for California

6. Time to degree

The information that is now available seems to show that students in many joint doctoral programs complete their degrees in a remarkably short period of time, given the complex nature of the cooperative venture and in comparison with students pursuing a doctoral degree at a single institution. This apparent efficiency of the joint doctoral program may be due either to a majority of the students entering the program with a master's degree or to the time and conditions of joint admission to the program, or to such factors as the organization of the curriculum and student motivation to complete it in the shortest time possible. This finding of shortened time to the degree raises the possibility of enhancing articulation of the State University master's degree with the final stages of the University's doctoral degree requirements

7. Duplication of effort

Some joint doctoral degree programs are unique insofar as the particular University of California

campus would probably not be offering the program if it were not for the cooperation of the State University. In other instances, the joint degree program appears to overlap with a stand-alone doctoral program that the University offers in the same general discipline and on the same campus as that which is involved in the joint degree. The issue is whether there are advantages to the campus, the State, or the students that these parallel degree programs offer, and what they may add to the State University campus' academic climate

8. Relationship to undergraduate education

This issue is how the offering of joint doctoral programs affects undergraduate education in the State University -- positively, negatively, or not at all. The quality of instruction may increase by virtue of having teaching assistants who are doctoral students and faculty members who have increased opportunity to engage in research in their particular fields.

In the present circumstances of severe limitations on State funding of new and expanded programs in higher education, the question of where the funds

are coming from to support the programs adequately takes on new importance, in terms of resources for faculty, equipment, library acquisitions, and other kinds of instructional support. The University of California's income from contracts, grants, and gifts for its research-related functions subsidizes its graduate programs by providing non-State funding for equipment, materials, students as research assistants, and support for faculty that goes beyond what the State normally provides. The State University is not denied this source of support, but it is limited in its ability to obtain it because of the primary emphasis of its mission on teaching, rather than research

9. State-level data

A computerized systemwide or state-level data base is needed to facilitate the monitoring of cooperative graduate programs on an ongoing basis. Not only should the student data base be constructed in order to yield adequate and reliable information about joint doctoral students but also information about costs and expenditures for these programs should be updated routinely, in order to monitor their productivity, efficiency, and cost-effectiveness.

References

California Postsecondary Education Commission. "Report on Joint Doctoral Programs in California Higher Education." Information Item 2C, January 20-21, 1980; Action Items 2B and 7A, February 17-18, 1980

--. "Commission Staff Evaluation of the [Joint Graduate Board] Report on the Joint Doctoral Programs in Ecology and Genetics." Action Item 1C, May 18, 1981, Agenda for the California Postsecondary Education Commission, Sacramento: The Commission, 1981.

Joint Graduate Board "Reports on Joint Doctoral Programs in Ecology and Genetics " Reproduced as the Appendix to "Commission Staff Evaluation of the Report on the Joint Doctoral Programs in Ecology and Genetics " Action Item 1C, May 18, 1981, Agenda for the California Postsecondary Education Commission Sacramento The Commission, 1981.

Office of the Legislative Analyst. *Analysis of the 1988-89 Budget Bill: Report of the Legislative Analyst to the Joint Legislative Budget Committee* Sacramento: Office of the Legislative Analyst, February 24, 1988.

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

THE California Postsecondary Education Commission is a citizen board established in 1974 by the Legislature and Governor to coordinate the efforts of California's colleges and universities and to provide independent, non-partisan policy analysis and recommendations to the Governor and Legislature

Members of the Commission

The Commission consists of 17 members. Nine represent the general public, with three each appointed for six-year terms by the Governor, the Senate Rules Committee, and the Speaker of the Assembly. Six others represent the major segments of postsecondary education in California. Two student members are appointed by the Governor.

As of February 1995, the Commissioners representing the general public are

Henry Der, San Francisco, *Chair*
C. Thomas Dean, Long Beach
Elaine Alquist, Santa Clara
Mim Andelson, Los Angeles
Jeffrey I. Marston, San Diego
Guillermo Rodriguez, Jr., San Francisco,
Vice Chair
Melinda G. Wilson, Torrance
Linda J. Wong, Los Angeles
Ellen F. Wright, Saratoga

Representatives of the segments are

Roy T. Brophy, Fair Oaks, appointed by the Regents of the University of California,
Yvonne W. Larsen, San Diego, appointed by the California State Board of Education,
Alice Petrossian, Glendale, appointed by the Board of Governors of the California Community Colleges,
Ted J. Saenger, San Francisco, appointed by the Trustees of the California State University, and
Kyhl Smeby, Pasadena, appointed by the Governor to represent California's independent colleges and universities, and
vacant, representing the Council for Private Postsecondary and Vocational Education

The two student representatives are

Stephen Leshner, Meadow Vista
Beverly A. Sandeen, Costa Mesa

Functions of the Commission

The Commission is charged by the Legislature and Governor to "assure the effective utilization of public postsecondary education resources, thereby eliminating waste and unnecessary duplication, and to promote diversity, innovation, and responsiveness to student and societal needs."

To this end, the Commission conducts independent reviews of matters affecting the 2,600 institutions of postsecondary education in California, including community colleges, four-year colleges, universities, and professional and occupational schools.

As an advisory body to the Legislature and Governor, the Commission does not govern or administer any institutions, nor does it approve, authorize, or accredit any of them. Instead, it performs its specific duties of planning, evaluation, and coordination by cooperating with other State agencies and non-governmental groups that perform those other governing, administrative, and assessment functions.

Operation of the Commission

The Commission holds regular meetings throughout the year at which it debates and takes action on staff studies and takes positions on proposed legislation affecting education beyond the high school in California. By law, its meetings are open to the public. Requests to speak at a meeting may be made by writing the Commission in advance or by submitting a request before the start of the meeting.

The Commission's day-to-day work is carried out by its staff in Sacramento, under the guidance of its executive director, Warren Halsey Fox, Ph.D., who is appointed by the Commission.

Further information about the Commission and its publications may be obtained from the Commission offices at 1303 J Street, Suite 500, Sacramento, California 95814-2938, telephone (916) 445-7933 or Calnet 485-7933, FAX (916) 327-4417.

CALIFORNIA'S JOINT DOCTORAL PROGRAMS

California Postsecondary Education Commission Report 92-3

ONE of a series of reports published by the Commission as part of its planning and coordinating responsibilities. Additional copies may be obtained without charge from the Publications Office, California Postsecondary Education Commission, Third Floor, 1020 Twelfth Street, Sacramento, California 95814-3985

Recent reports of the Commission include

91-5 Status Report on Human Corps Activities, 1991. The Fourth in a Series of Five Annual Reports to the Legislature in Response to Assembly Bill 1829 (Chapter 1245, Statutes of 1987) (April 1991)

91-6 The State's Reliance on Non-Governmental Accreditation, Part Two. A Report to the Legislature in Response to Assembly Bill 1993 (Chapter 1324, Statutes of 1989) (April 1991)

91-7 State Policy on Technology for Distance Learning. Recommendations to the Legislature and the Governor in Response to Senate Bill 1202 (Chapter 1038, Statutes of 1989) (April 1991)

91-8 The Educational Equity Plan of the California Maritime Academy. A Report to the Legislature in Response to Language in the Supplemental Report of the 1990-91 Budget Act (April 1991)

91-9 The California Maritime Academy and the California State University. A Report to the Legislature and the Department of Finance in Response to Supplemental Report Language of the 1990 Budget Act (April 1991)

91-10 Faculty Salaries in California's Public Universities, 1991-92. A Report to the Legislature and Governor in Response to Senate Concurrent Resolution No. 51 (1965) (April 1991)

91-11 Updated Community College Transfer Student Statistics, Fall 1990 and Full-Year 1989-90. A Staff Report to the California Postsecondary Education Commission (April 1991)

91-12 Academic Program Evaluation in California, 1989-90. The Commission's Fifteenth Annual Report on Program Planning, Approval, and Review Activities (September 1991)

91-13 California's Capacity to Prepare Registered Nurses. A Preliminary Inquiry Prepared for the Legislature in Response to Assembly Bill 1055 (Chapter 924, Statutes of 1990) (September 1991)

91-14 Supplemental Report on Academic Salaries, 1990-91. A Report to the Governor and Legislature in Response to Senate Concurrent Resolution No. 51 (1965) and Supplemental Language to the 1979, 1981, and 1990 Budget Acts (September 1991)

91-15 Approval of Las Positas College in Livermore. A Report to the Governor and Legislature on the Development of Las Positas College -- Formerly the Livermore Education Center of Chabot College (September 1991)

91-16 Update on Long-Range Planning Activities. Report of the Executive Director, September 16, 1991 (September 1991)

91-17 The Role, Structure, and Operation of the Commission. A Preliminary Response to Senate Bill 2374 (October 1991)

91-18 1991-92 Plan of Work for the California Postsecondary Education Commission. Major Studies and Other Commission Activities (October 1991)

91-19 Reauthorization of the Higher Education Act of 1965 as Amended. A Report to California's Congressional Delegation Summarizing Consensus in California's Higher Education Community Regarding Proposed Revisions of the Act (December 1991)

91-20 Student Fees, Access, and Quality. Prospects and Issues for the 1992-93 Budget Process (December 1991)

91-21 Legislative and State Budget Priorities of the Commission, 1992. A Report of the California Postsecondary Education Commission (December 1991)

91-22 Proposed Construction of the Western Nevada County Center, Sierra Joint Community College District. A Report to the Governor and Legislature in Response to a Request for Capital Funds for a Permanent Off-Campus Center in the Grass Valley/Nevada City Area (December 1991)

92-1 Final Report on the Effectiveness of Intersegmental Student Preparation Programs. The Third Report to the Legislature in Response to Item 6420-0011-001 of the 1988-89 Budget Act (January 1992)

92-2 Assessing Campus Climate. Feasibility of Developing an Educational Equity Assessment System (January 1992)

92-3 California's Joint Doctoral Programs. A Report on Doctoral Programs Offered by Campuses of the California State University with Campuses of the University of California and the Claremont Graduate School (January 1992)

92-4 Prospects for Long-Range Capital Planning in California Public Higher Education. A Preliminary Review. A Staff Report to the California Postsecondary Education Commission (January 1992)